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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight E1452A

Agilent E1452A 20 MHz 32 Channel Pattern I/O Terminator Module The Agilent/Keysight E1452A isaC-size, 1-slot, register-based VXI 20 MHz pattern I/O module with 32 I/O channels. OEM family materials state it is functionally like E1451A but terminates local bus clocks at the end of an E1450A-timed pattern-module chain. End-of-chain digital pattern I/O in E1450A-based VXI functional testers. Product Family: E1450/51/52 digital functional test The Agilent/Keysight E1452A isaC-size, 1-slot, register-based VXI 20 MHz pattern I/O module with 32 I/O channels. OEM family materials state it is functionally like E1451A but terminates local bus clocks at the end of an E1450A-timed pattern-module chain. End-of-chain digital pattern I/O in E1450A-based VXI functional testers. Product Family: E1450/51/52 digital functional test Local Bus Clock Role: terminates local bus clocks



MODEL

**Agilent / Keysight
E1452A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E1452A

LISTING

<https://aumictechlabs.com/products/e1452a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E1452A is a C-size, 1-slot VXIbus Pattern Input/Output module engineered for digital stimulus and response capture within automated test systems. Operating as a register-based architecture, it sends data to and receives data from devices under test (DUTs) via 32 I/O pins organized as four independent 8-bit ports. The module integrates into the 75000 Model D20 Digital Functional Test System, where it typically receives clock signals from an E1450A Timing Module, though standalone operation with external clocking is supported. Technical Specifications

Form Factor: C-size, 1-slot Vxibus module I/O Architecture: 32 I/O pins, four 8-bit ports Pattern Depth: 64 K segmentable Memory: 64 KB per I/O port, segmentable for single or multiple tests Maximum Pattern Rate: 20 MHz (external clock) Memory Architecture: Non-dual-ported; generator and capture activity must halt during memory read/write operations

Key Features

Flexible Port Programming: Each port independently configurable for output stimulus, record capture, or real-time comparison

Programmable Tri-state Control: On-the-fly tri-state capability enables port paralleling for bi-directional transfers or doubled I/O speed

Skew Compensation: Individual port delay programming eliminates timing-induced skew errors via calibration memory constants

Terminating Module Function: Acts as the final module in Pattern I/O chains when used with E1450A Timing Module, terminating pattern clock lines and ensuring proper local bus termination

Dual Clocking Options: Primary operation via E1450A Timing Module or external clock signal for standalone configurations

Typical Applications

Digital functional test systems requiring parallel stimulus and response verification

Multi-port pattern generation and capture in automated test environments

Real-time response comparison during device characterization

Compatibility & Integration

The E1452A operates within the 75000 Model D20 system architecture and requires SCPI programming via an E1406A Co-processor. When external clocking is deployed, the E1451A Pattern I/O module becomes the standalone alternative. Proper termination configuration demands E1452A placement as the final module in pattern I/O chains.

E1452A Characteristics / Specifications

PARAMETER	VALUE
I/O Channels	32
Pattern Rate Class	20 MHz
Module Size	C
Slots Occupied	1
VXI Device Type	register based
Product Family	E1450/51/52 digital functional test
Companion Timing Module	E1450A
Local Bus Clock Role	terminates local bus clocks
Related Pass Through Module	E1451A
Maximum Modules Per Timing Module	up to 10 E1451A/E1452A
Programming	register based with timing sequencer
Connectors	P1/P2
Form Factor	C-size VXI
Operating Temperature Class	0 to 55 C
Channel Direction	programmable pattern I/O class
Synchronization	E1450A pattern clocks
Stimulus Clocks Available From Timer	6
Response Clocks Available From Timer	6
Edge Timing Resolution From Timer	6.25 ns
Mainframe Use	C-size VXI Slot 1+ (not Slot 0)
Documentation	E1450/51/52 digital test manuals
Sequencer Memory On Companion Timer	65536 vectors
Subcycle Resolution On Companion Timer	6.25 ns
General Purpose DUT Controls From Timer	up to 8

PARAMETER	VALUE
Operating temperature	Class: 0 to 55 C

E1452A Specifications

PARAMETER	VALUE
Applications	End-of-chain digital pattern I/O in E1450A-based VXI functional testers.
Key Features	32 pattern I/O channels
Works with E1450A timing module	Terminates local bus clocks
Technical Specifications	I/O Channels: 32

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
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Documentation	E1450/51/52 digital test manuals
Sequencer Memory On Companion Timer	65536 vectors
Subcycle Resolution On Companion Timer	6.25 ns
General Purpose DUT Controls From Timer	up to 8 Notes Channel count, 20 MHz class, and terminator clock role from Agilent E1450A/E1451A/E1452A family product descriptions. Confirm electrical levels and termination position in the installed chain.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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PARAMETER	VALUE
I/O Channels	32
Pattern Rate Class	20 MHz
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Slots Occupied	1
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Product Family	E1450/51/52 digital functional test
Companion Timing Module	E1450A
Local Bus Clock Role	terminates local bus clocks
Related Pass Through Module	E1451A
Maximum Modules Per Timing Module	up to 10 E1451A/E1452A
Programming	register based with timing sequencer
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Form Factor	C-size VXI
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PARAMETER

VALUE

General Purpose DUT Controls From Timer up to 8

Notes

Channel count, 20 MHz class, and terminator clock role from Agilent E1450A/E1451A/E1452A family product descriptions. Confirm electrical levels and termination position in the installed chain.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.